

RECEIVED  
CENTRAL FAX CENTER

AUG 04 2008

Appln. of: SCHILLING  
Filed: April 27, 2001  
Page 2 of 8

In the Claims:

1. (Currently Amended) An axially staged annular gas-turbine combustion chamber comprising:

- a plurality of pilot burners arranged in an annular configuration;
- at least one pilot zone positioned adjacent the pilot burners;
- a plurality of main burners arranged in an annular configuration;
- at least one common main zone positioned adjacent the main burners, the pilot burners and the main burners being axially and radially offset relative to each other with exit portions of the main burners located downstream of exit portions of the pilot burners, said common main zone located downstream of the pilot zone and comprising:
  - an outer flame-tube wall, and
  - an inner flame-tube wall, each wall provided with ports for the introduction of air into the common main zone, with said main burners being radially positioned toward the outer flame-tube wall and with said pilot burners being radially positioned toward the inner flame-tube wall,

wherein the outer-flame tube wall ports include a first arrangement of ports including a single first row of ports and the inner flame-tube wall ports include a second arrangement of ports including a single first row of ports, with the ports of the second arrangement being circumferentially aligned off-center with the ports of the first row of the first arrangement, wherein the first arrangement of ports includes a second row of ports, with the ports of the second row being aligned circumferentially off-center with, and positioned rearwards of the ports of the first row of the first arrangement.

Appln. of: SCHILLING  
Filed: April 27, 2001  
Page 3 of 8

2. (Cancelled)

3. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 1, wherein the second arrangement of ports on the inner flame-tube wall includes a second row of ports, with the ports of the second row of the second arrangement being aligned circumferentially on-center with the ports of the first row of the first arrangement.

4. (Currently Amended) A gas-turbine combustion chamber in accordance with Claim 12, wherein the following relationships are satisfied by a distance  $t_1$  from centers of the ports of the first row of the first arrangement to an upstream wall of a flame tube of one of the main burners, a distance  $t_2$  from centers of the ports of the second row of the first arrangement to the upstream wall of the flame tube of the one of the main burners, and a height  $h$  of the flame tube of the one of the main burners:

$$t_1/h \geq 0.4,$$

$$t_2/h \leq 1.2.$$

5. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 1, wherein the ports are circular.

6. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 1, wherein the ports are non-circular.

Appln. of: SCHILLING  
Filed: April 27, 2001  
Page 4 of 8

7. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 1, wherein the ports are plain holes in the flame-tube walls.

8. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 1, wherein the ports are plunged holes in the flame-tube walls having small rims extending into the combustion chamber.

9. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 1, wherein the ports include tubular chutes extending into the combustion chamber.

10. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 1, wherein exit axes of the ports of the second arrangement are respectively aligned to lie within an angle formed between a first line extending from the respective exit axes of the ports to an intersection (A) of a main burner axis with a main burner exit plane and a second line extending from the respective axes of the ports to an intersection (C) of an axis of downstream-most ports of the first arrangement with the outer flame-tube wall.

11. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 1, wherein a diameter  $d$  of the ports is set so that  $d/h$  lies in a range of  $0.12 \leq d/h \leq 0.3$ , where  $h$  is a flame-tube height of the main burners.

Appln. of: SCHILLING  
Filed: April 27, 2001  
Page 5 of 8

12. (Currently Amended) A gas-turbine combustion chamber in accordance with Claim 12, wherein the ports of the first row of the second arrangement are aligned circumferentially on-center with the ports of the second row of the first arrangement.

13. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 12, wherein the second arrangement of ports on the inner flame-tube wall includes a second row of ports, with the ports of the second row of the second arrangement being aligned circumferentially on-center with the ports of the first row of the first arrangement.

14. (Currently Amended) A gas-turbine combustion chamber in accordance with Claim 12, wherein the second arrangement of ports on the inner flame-tube wall includes a second row of ports, with the ports of the second row of the second arrangement being aligned circumferentially on-center with the ports of the first row of the first arrangement.

15. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 13, wherein the ports of the second row of the second arrangement are rearward of the ports of the first row of the second arrangement.

16. (Previously Presented) A gas-turbine combustion chamber in accordance with Claim 12, wherein the ports of the second row of the first arrangement are rearward of the ports of the first row of the second arrangement.

Appln. of: SCHILLING  
Filed: April 27, 2001  
Page 6 of 8

17. (New) A gas-turbine combustion chamber in accordance with Claim 1, wherein the ports of the first arrangement are greater in number than the ports of the second arrangement.

18. (New) A gas-turbine combustion chamber in accordance with Claim 17, wherein the ports of the first arrangement are double in number than the ports of the second arrangement.